

## IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method comprising:  
  
decomposing input data into a plurality of code-blocks;  
  
assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders  
  
for coding [to code] the plurality of code-blocks in parallel [to balance, to the extent possible, an amount of coding to be performed by each of the plurality of MQ coders] so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible, when assigning code-blocks on a code block basis.
2. (Canceled)
3. (Original) The method defined in Claim 1 wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein  
  
the first MQ coder is assigned code-blocks corresponding to LL<sub>3</sub>, HL<sub>3</sub>, LH<sub>3</sub>, HH<sub>3</sub>, HL<sub>2</sub>, LH<sub>2</sub>, HH<sub>2</sub>, HL<sub>1</sub> and HH<sub>1</sub> luminance subbands;  
  
the second MQ coder is assigned code-blocks corresponding to LL<sub>3</sub>, HL<sub>3</sub>, LH<sub>3</sub>, HH<sub>3</sub>, HL<sub>2</sub>, LH<sub>2</sub>, HH<sub>2</sub>, HL<sub>1</sub> and HH<sub>1</sub> subbands of a first set of chrominance subbands;  
  
the third MQ coder is assigned code-blocks corresponding to LL<sub>3</sub>, HL<sub>3</sub>, LH<sub>3</sub>, HH<sub>3</sub>, HL<sub>2</sub>, LH<sub>2</sub>, HH<sub>2</sub>, HL<sub>1</sub> and HH<sub>1</sub> subbands of a second set of chrominance subbands; and  
  
the fourth MQ coder is assigned code-blocks corresponding to a LH<sub>1</sub> luminance subband, a LH<sub>1</sub> subband of the first set of chrominance subbands, and LH<sub>1</sub> subband of the second set of chrominance subbands.

4. (Original) The method defined in Claim 3 wherein the plurality of code-blocks is 4:4:4 data.

5. (Original) The method defined in Claim 1 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $HH_2$ , and  $HH_1$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ , and  $HH_1$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ , and  $HH_1$  subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to  $HL_1$  and  $LH_1$  luminance subbands;

the fifth MQ coder is assigned code-blocks corresponding to  $HL_1$  and  $LH_1$  subbands of the first set of chrominance subbands; and

the sixth MQ coder is assigned code-blocks corresponding to a  $HL_1$  and  $LH_1$  subbands of the second set of chrominance subbands.

6. (Original) The method defined in Claim 5 wherein the plurality of code-blocks is 4:4:4 data.

7. (Original) The method defined in Claim 1 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$  luminance subbands and an  $HL_1$  subband of a first set of chrominance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$  subbands of the first set of chrominance subbands and a  $HL_1$  subband of a second set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $LH_2$  and  $LH_1$  subbands of the second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to  $LH_2$ ,  $HH_2$  and  $LH_1$  luminance subbands;

the fifth MQ coder is assigned code-blocks corresponding to  $LH_2$  and  $HH_1$  luminance subbands and a  $LH_2$  subband of the first set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband and  $LH_2$  and  $HH_2$  subbands of the first set of chrominance subbands;

the seventh MQ coder is assigned code-blocks corresponding to a  $LH_1$  subband of the first set of chrominance subbands and  $LH_2$  and  $HH_2$  subbands of the second set of chrominance subbands; and

the eighth MQ coder is assigned code-blocks corresponding to a  $HH_1$  subband of the first set of chrominance subbands and a  $HH_1$  subband of the second set of chrominance subbands.

8. (Original) The method defined in Claim 7 wherein the plurality of code-blocks is 4:4:4 data.

9. (Original) The method defined in Claim 1 wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ , and  $HH_1$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ , and  $HL_1$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ , and  $HL_1$  subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to  $HL_1$  and  $LH_1$  luminance subbands.

10. (Original) The method defined in Claim 9 wherein the plurality of code-blocks is 4:2:2 data.

11. (Original) The method defined in Claim 1 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $LH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$  luminance subbands and a  $LH_2$  subband of a first set of chrominance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $LH_3$ , and  $HH_2$  subbands of a second set of chrominance subbands and a  $HH_1$  luminance subband;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $LH_3$ , and  $LH_2$  subbands of the first set of chrominance subbands and a  $HL_1$  subband of the second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a  $HL_3$ ,  $HH_3$  and  $LH_1$  luminance subbands and a  $LH_2$  subband of the second set of chrominance subbands;

the fifth MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband and  $LH_3$ ,  $HH_3$  and  $LH_2$  subbands of the second set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a  $HL_3$ ,  $HH_3$ ,  $HH_2$ , and  $HL_1$  subbands of the first set of chrominance subbands.

12. (Original) The method defined in Claim 11 wherein the plurality of code-blocks is 4:2:2 data.

13. (Original) The method defined in Claim 1 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ , and  $HH_2$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$  and  $HH_2$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ , and  $HH_2$  subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a  $HL_1$  luminance subband;

the fifth MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband;

the sixth MQ coder is assigned code-blocks corresponding to a  $HH_1$  luminance subband;

the seventh MQ coder is assigned code-blocks corresponding to a  $HL_1$  subband of the first set of chrominance subbands;

the eighth MQ coder is assigned code-blocks corresponding to a  $HL_1$  subband of the second set of chrominance subbands.

14. (Original) The method defined in Claim 13 wherein the plurality of code-blocks is 4:2:2 data.

15. (Original) The method defined in Claim 1 wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HH_2$ , and  $HL_1$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $HH_1$  luminance subband and  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ , and  $HH_2$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband and  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ , and  $HH_2$  subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to  $HL_2$  and  $LH_2$  luminance subbands,  $HL_2$  and  $LH_2$  subbands of the first set of chrominance subbands, and  $HL_2$  and  $LH_2$  subbands of the second set of chrominance subbands.

16. (Original) The method defined in Claim 15 wherein the plurality of code-blocks is 4:1:1 data.

17. (Original) The method defined in Claim 1 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$  and  $HH_2$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$  and  $HH_2$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$  and  $HH_2$  subbands of a second set of chrominance subbands;

the fourth MQ-coder is assigned code-blocks corresponding to a  $HL_1$  luminance subband;

the fifth MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband;

and

the sixth MQ coder is assigned code-blocks corresponding to a  $HH_1$  luminance subband.

18. (Original) The method defined in Claim 17 wherein the plurality of code-blocks is 4:1:1 data.

19. (Original) The method defined in Claim 1 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ , and  $HH_2$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ , and  $HH_2$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$  and  $HH_2$  subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a  $HL_2$  luminance subband, a  $HL_2$  subband of the first set of chrominance subbands, and a  $HL_2$  subband of the second set of chrominance subbands;

the fifth MQ coder is assigned code-blocks corresponding to a  $LH_2$  luminance subband, a  $LH_2$  subband of the first set of chrominance subbands, and a  $LH_2$  subband of the second set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a LH<sub>1</sub> luminance subband;  
the seventh MQ-coder is assigned code-blocks corresponding to a HL<sub>1</sub> luminance subband;  
the eighth MQ coder is assigned code-blocks corresponding to a HH<sub>1</sub> luminance subband.

20. (Original) The method defined in Claim 19 wherein the plurality of code-blocks is 4:1:1 data.

21. (Currently Amended) An apparatus comprising:  
means for decomposing input data into a plurality of code-blocks;  
means for assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding [to code] the plurality of code-blocks in parallel [to balance, to the extent possible, an amount of coding to be performed by each of the plurality of MQ coders] so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible when assigning code-blocks on a code block basis.

22. (Canceled)

23. (Original) The apparatus defined in Claim 21 wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL<sub>3</sub>, HL<sub>3</sub>, LH<sub>3</sub>, HH<sub>3</sub>, HL<sub>2</sub>, LH<sub>2</sub>, HH<sub>2</sub>, HL<sub>1</sub> and HH<sub>1</sub> luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL<sub>3</sub>, HL<sub>3</sub>, LH<sub>3</sub>, HH<sub>3</sub>, HL<sub>2</sub>, LH<sub>2</sub>, HH<sub>2</sub>, HL<sub>1</sub> and HH<sub>1</sub> subbands of a first set of chrominance subbands;



the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ ,  $HL_1$  and  $HH_1$  subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband, a  $LH_1$  subband of the first set of chrominance subbands, and  $LH_1$  subband of the second set of chrominance subbands.

24. (Original) The apparatus defined in Claim 23 wherein the plurality of code-blocks is 4:4:4 data.

25. (Original) The apparatus defined in Claim 21 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $HH_2$ , and  $HH_1$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ , and  $HH_1$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ , and  $HH_1$  subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to  $HL_1$  and  $LH_1$  luminance subbands;

the fifth MQ coder is assigned code-blocks corresponding to  $HL_1$  and  $LH_1$  subbands of the first set of chrominance subbands; and

the sixth MQ coder is assigned code-blocks corresponding to a  $HL_1$  and  $LH_1$  subbands of the second set of chrominance subbands.

26. (Original) The apparatus defined in Claim 25 wherein the plurality of code-blocks is 4:4:4 data.

27. (Original) The apparatus defined in Claim 21 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$  luminance subbands and an  $HL_1$  subband of a first set of chrominance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$  subbands of the first set of chrominance subbands and a  $HL_1$  subband of a second set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $LH_2$  and  $LH_1$  subbands of the second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to  $LH_2$ ,  $HH_2$  and  $LH_1$  luminance subbands;

the fifth MQ coder is assigned code-blocks corresponding to  $LH_2$  and  $HH_1$  luminance subbands and a  $LH_2$  subband of the first set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband and  $LH_2$  and  $HH_2$  subbands of the first set of chrominance subbands;

the seventh MQ coder is assigned code-blocks corresponding to a  $LH_1$  subband of the first set of chrominance subbands and  $LH_2$  and  $HH_2$  subbands of the second set of chrominance subbands; and

the eighth MQ coder is assigned code-blocks corresponding to a  $HH_1$  subband of the first set of chrominance subbands and a  $HH_1$  subband of the second set of chrominance subbands.

28. (Original) The apparatus defined in Claim 27 wherein the plurality of code-blocks is 4:4:4 data.

29. (Original) The apparatus defined in Claim 21 wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ , and  $HH_1$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ , and  $HL_1$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$ , and  $HL_1$  subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to  $HL_1$  and  $LH_1$  luminance subbands.

30. (Original) The apparatus defined in Claim 29 wherein the plurality of code-blocks is 4:2:2 data.

31. (Original) The apparatus defined in Claim 21 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $LH_3$ ,  $HL_2$ ,  $LH_2$ ,  $HH_2$  luminance subbands and a  $LH_2$  subband of a first set of chrominance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $LH_3$ , and  $HH_2$  subbands of a second set of chrominance subbands and a  $HH_1$  luminance subband;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $LH_3$ , and  $LH_2$  subbands of the first set of chrominance subbands and a  $HL_1$  subband of the second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a  $HL_3$ ,  $HH_3$  and  $LH_1$  luminance subbands and a  $LH_2$  subband of the second set of chrominance subbands;

the fifth MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband and  $LH_3$ ,  $HH_3$  and  $LH_2$  subbands of the second set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a  $HL_3$ ,  $HH_3$ ,  $HH_2$ , and  $HL_1$  subbands of the first set of chrominance subbands.

32. (Original) The apparatus defined in Claim 31 wherein the plurality of code-blocks is 4:2:2 data.

33. (Original) The apparatus defined in Claim 21 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ , and  $HH_2$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$  and  $HH_2$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$ , and  $HH_2$  subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a  $HL_1$  luminance subband;

the fifth MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband;

the sixth MQ coder is assigned code-blocks corresponding to a  $HH_1$  luminance subband;

the seventh MQ coder is assigned code-blocks corresponding to a  $HL_1$  subband of the first set of chrominance subbands;

the eighth MQ coder is assigned code-blocks corresponding to a  $HL_1$  subband of the second set of chrominance subbands.

34. (Original) The apparatus defined in Claim 33 wherein the plurality of code-blocks is 4:2:2 data.

35. (Original) The apparatus defined in Claim 21 wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HH_2$ , and  $HL_1$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $HH_1$  luminance subband and  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ , and  $HH_2$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband and  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ , and  $HH_2$  subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to  $HL_2$  and  $LH_2$  luminance subbands,  $HL_2$  and  $LH_2$  subbands of the first set of chrominance subbands, and  $HL_2$  and  $LH_2$  subbands of the second set of chrominance subbands.

36. (Original) The apparatus defined in Claim 35 wherein the plurality of code-blocks is 4:1:1 data.

37. (Original) The apparatus defined in Claim 21 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$  and  $HH_2$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$  and  $HH_2$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ ,  $HL_2$ ,  $LH_2$  and  $HH_2$  subbands of a second set of chrominance subbands;

the fourth MQ-coder is assigned code-blocks corresponding to a  $HL_1$  luminance subband;

the fifth MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband;

and

the sixth MQ coder is assigned code-blocks corresponding to a  $HH_1$  luminance subband.

38. (Original) The apparatus defined in Claim 37 wherein the plurality of code-blocks is 4:1:1 data.

39. (Original) The apparatus defined in Claim 21 wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ , and  $HH_2$  luminance subbands;

the second MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$ , and  $HH_2$  subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to  $LL_3$ ,  $HL_3$ ,  $LH_3$ ,  $HH_3$  and  $HH_2$  subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a  $HL_2$  luminance subband, a  $HL_2$  subband of the first set of chrominance subbands, and a  $HL_2$  subband of the second set of chrominance subbands;

the fifth MQ coder is assigned code-blocks corresponding to a  $LH_2$  luminance subband, a  $LH_2$  subband of the first set of chrominance subbands, and a  $LH_2$  subband of the second set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a  $LH_1$  luminance subband;

the seventh MQ-coder is assigned code-blocks corresponding to a  $HL_1$  luminance subband;

the eighth MQ coder is assigned code-blocks corresponding to a  $HH_1$  luminance subband.

40. (Original) The apparatus defined in Claim 39 wherein the plurality of code-blocks is 4:1:1 data.